## ABSTRACT

The present invention relates to methods and compositions for treating thrombotic diseases using gene delivery technologies. In one embodiment, a therapeutically effective amount of a TM gene product is expressed in a TM-deficient mammal using a viral or non viral vector. In another embodiment, the vector-mediated *in vivo* TM gene expression is used for the treatment of atherosclerotic cardiovascular disease, pulmonary hypertension, acute inflammatory diseases, end-stage renal failure disease, or Alzheimer disease. In yet another embodiment, a vector carrying a TM inhibitory polynucleotide in which the vector is introduced into a mammal to reduce the TM activity or TM gene expression *in vivo*.